

CLAIM SUMMARY DOCUMENT:

Claims 1-6 (Canceled)

Claim 7 (Currently amended) ~~The high-power semiconductor module as claimed in claim 6, wherein~~ A high-power semiconductor module, comprising:

a base plate;

a cover plate;

a number of flat semiconductor chips located between the base plate and the cover plate;

wherein

lower faces of the semiconductor chips rest flat on the base plate and establish first electrical contacts between the lower faces of the semiconductor chips and the inner face of the base plate facing toward the flat semiconductor chips,

the cover plate is arranged parallel to the base plate and applied to the upper faces of the semiconductor chips with pressure, establishing second electrical contacts between the upper faces of the semiconductor chips and the inner face of the cover plate facing toward the semiconductor chips,

the faces of the base plate and of the cover plate that face away from the semiconductor chips are each electrically isolated from the semiconductor chips,

the base plate comprises an electrically insulating substrate and a first metal coating on the electrically insulating substrate, and the first metal coating forms the inner face of the base plate facing toward the flat semiconductor chips,

the semiconductor chips are mounted, preferably by techniques such as bonding, soldering or welding, preferably by soldering, on the first metal coating,

~~the third electrical contact is established via a second electrically conductive,~~
conductive elastic connecting element, preferably in the form of a second contact spring, is located between the cover plate and the base plate, and

the pressure on the cover plate establishes a third electrical contact between the second electrically conductive elastic connecting element and the first metal coating.

Claim 8 (Currently amended) The high-power semiconductor module as claimed in claim 6 7, wherein:

the cover plate comprises a first isolation ~~plate~~ plate, ~~on whose inner face and~~ a first metallic contact plate;

~~is arranged, via which the second electrical contacts with the semiconductor chips are established, and wherein~~

the first metallic contact plate is located between the first isolation plate and the upper faces of the semiconductor chips and in electrical contact with the upper faces of the semiconductor chips;

a second metallic contact plate is arranged on the first metallic contact ~~plate, plate and~~ electrically isolated from it, ~~via which the third electrical contact with the first metal coating on the base plate is established~~ the first metallic contact plate; and

the second electrically conductive elastic connecting element is located between and in electrical contact with the first metal coating and the second metallic contact plate.

Claim 9 (Previously amended) The high-power semiconductor module as claimed in claim 8, wherein the first and the second metallic contact plates are isolated from one another by a second isolation plate.

Claim 10 (Currently amended) The high-power semiconductor module as claimed in claim ~~±~~ 7, wherein an electrically insulating housing is arranged between the base plate and the cover plate, and encloses the semiconductor chips and the associated contact devices.

Claim 11 (Currently amended) The high-power semiconductor module as claimed in claim ~~±~~ 7, wherein the semiconductor chips are connected electrically in parallel within the high-power semiconductor module.

Claim 12 (Previously amended) The high-power semiconductor module as claimed in claim 11, wherein at least some of the semiconductor chips are controllable semiconductor switches, in particular IGBTs.

Claim 13 (Currently amended) ~~Use of a~~ A high-power semiconductor module as claimed in claim ~~1~~ 7, ~~in which the high-power semiconductor module is arranged~~ together with a cooling ~~apparatus, which is~~ apparatus arranged adjacent to the outer face of the base plate, to form a stack, ~~stack, and pressure is applied to it in the stack.~~